AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of the claims in this application.

Listing of the claims:

1. (canceled)

2. (canceled)

3. (canceled)

4. (canceled)

5. (currently amended) A method for reducing titanium metal from its oxides, comprising:

a. providing a composite body ~~by means of claim 1~~ comprising a metal matrix containing particles of at least one titanium containing oxide, wherein said metal matrix comprises aluminum and said composite body is formed by infiltrating a loose bed of said particles with a metal comprising aluminum, further wherein said particles are coated with magnesium nitride before said bed is infiltrated by said metal; and

b. chemically reacting said ~~reducing~~ aluminum of said matrix and said titanium-containing oxide in said composite body in a redox reaction to form a chemically transformed composite body, and thereby reducing said titanium-containing oxide to a titanium-containing metal.

6. (Original) A method for reducing titanium metal from its oxides, comprising:

a. providing a permeable mass comprising at least one titanium-containing oxide;

b. providing at least one alloy of aluminum as an reactive infiltrant; and

c. reactively infiltrating said alloy into said titanium containing oxide to form a composite comprising aluminum oxide, and titanium-containing metal.

7. (Original) The method of claim 6, wherein said infiltrating is done in an oxidizing atmosphere to produce a ceramic matrix composite, and further wherein said ceramic matrix composite comprises at least one titanium-containing oxide.

8. (Original) A method for reducing titanium metal from its oxides comprising:

a. Forming a ceramic matrix composite pursuant to claim 6; and

b. Further chemically reacting said constituents of said ceramic matrix composite redox reaction to form a chemically transformed composite body and thereby reducing said titanium-containing oxide to a titanium-containing metal.

9. (Original) The method of claim 6, wherein said ceramic matrix composite further comprises at least one of elemental titanium and at least one aluminide of titanium.

10. (previously presented) The method of claim 5, further comprising separating said titanium-containing metal from said chemically transformed composite body.

11. (previously presented) The method of claim 6, further comprising separating said titanium-containing metal from said composite body.

12. (canceled)

13. (Original) The method of claim 6, wherein said reactive infiltration is carried out at a temperature of at least about 1250C.

14. (previously presented) The method of claim 5, wherein said redox reaction is carried out at a temperature of at least about 1250C.

15. (previously presented) The method of claim 5, wherein said redox reaction is carried out at a temperature of at least about 1850C.

16. (currently amended) The method of claim 5, further comprising adding at least one alpha titanium stabilizer to at least one of the ~~reducing metal~~ aluminum and the bed ~~(or permeable mass)~~.

17. (currently amended) The method of claim 5, further comprising adding at least one beta titanium stabilizer to at least one of the ~~reducing metal~~ aluminum and the bed ~~(or permeable mass)~~.

18. (currently amended) The method of claim 5, further comprising adding vanadium metal to at least one of the ~~reducing metal~~ aluminum and the bed ~~(or permeable mass)~~.

19. (currently amended) The method of claim 5, further comprising adding at least one oxide of vanadium to the bed ~~(or permeable mass)~~.

20. (previously presented) The method of claim 10, wherein said titanium-containing metal comprises titanium stabilized in at least one form selected from the group consisting of alpha, beta, and alpha-beta forms.

21. (canceled)

22. (canceled)

23. (previously presented) The method of claim 8, further comprising separating said titanium-containing metal from said chemically transformed composite body.

24. (previously presented) The method of claim 7, further comprising separating said titanium-containing metal from said composite body.

25. (previously presented) The method of claim 8, wherein said redox reaction is carried out at a temperature of at least about 1250C.

26. (previously presented) The method of claim 8, wherein said redox reaction is carried out at a temperature of at least about 1850C.

27. (previously presented) The method of claim 11, wherein said titanium-containing metal comprises titanium stabilized in at least one form selected from the group consisting of alpha, beta, and alpha-beta forms.